

# FLORIDA PLANT IMMIGRANTS

OCCASIONAL PAPER No. 10  
FAIRCHILD TROPICAL GARDEN

MORE PLANTS FROM THE  
FAIRCHILD GARDEN EXPEDITION  
TO THE  
PHILIPPINES AND NETHERLANDS INDIA

*By*  
DAVID FAIRCHILD

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# MORE PLANTS FROM THE FAIRCHILD GARDEN EXPEDITION TO THE PHILIPPINES AND NETHERLANDS INDIA

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SINCE the last Occasional Paper, many species of plants which were collected on the Fairchild Garden Expedition to the Philippines and Netherlands India have been growing from their small beginnings as seeds to a size when it is considered safe to distribute them to the members or the Association. Some of them will require especial care and all of them are rare and deserve to be looked after in proportion to their rarity. Few of them are yet offered by the trade and upon the success of some one of our members who gets a rare plant and makes it grow, is likely to depend the future of that species in this region. Years hence it may seed or if it only flowers it may furnish cuttings for the enterprising nurserymen here who are looking for new and valuable species of plants to propagate and sell to those of us already established here and others who are coming into Florida to live and make beautiful gardens around their houses. For in this work of testing new plants it is not enough to build up a great professional collection of introduced species. There must grow up around it a large group of amateurs who are watching that collection and whose private gardens are contributing to the care and testing out of the plants.

An amateur with time to study carefully his small collection, visiting each plant every day or two, can always find out things about them which the overworked superintendent of a thousand plants does not have the time to discover, and upon these discoveries often depends the success of the introduced species.

Last year the plants were all labelled with special zinc tags which it was hoped would be

legible for at least one year and would aid the members to keep the scientific names attached to the plants themselves. I note with some dismay that when these zinc tags get buried in our alkaline soil they show evident signs of deterioration. A tag which I attached to one of the red flowered Mangroves (*Bruguiera*) which is being grown to plant among the native Mangroves here and which is being watered with salt water has been almost completely eaten away. All tags should be inspected and if necessary renewed at least once a year. A note book describing where each plant has been set out and when, is the best insurance against the loss of its name.

Owing to the war shortage of zinc it will probably not be possible to attach to each plant a descriptive label as was done last year but a method will be worked out which will assist the members in keeping their new plants properly named. It is hoped that these notes, each bearing the Expedition number will help in the identification of the plants distributed. Some of them are illustrated here. In addition to the plants obtained from the F. G. Expedition there will be distributed various other new or rare species secured from seed produced locally whose suitability to Florida conditions is more or less assured.

To Mrs. Fairchild and me, these plants from the two great archipelagos of the Orient represent souvenirs of our stay in the lovely islands which compose them and it is with feelings of the deepest sadness that we learn they have become battlefields in this insane war and we cannot find out what has become of the friends there who helped us collect the seeds.



**No. 1—F. G. Ex. *Gardenia longiflora*.**

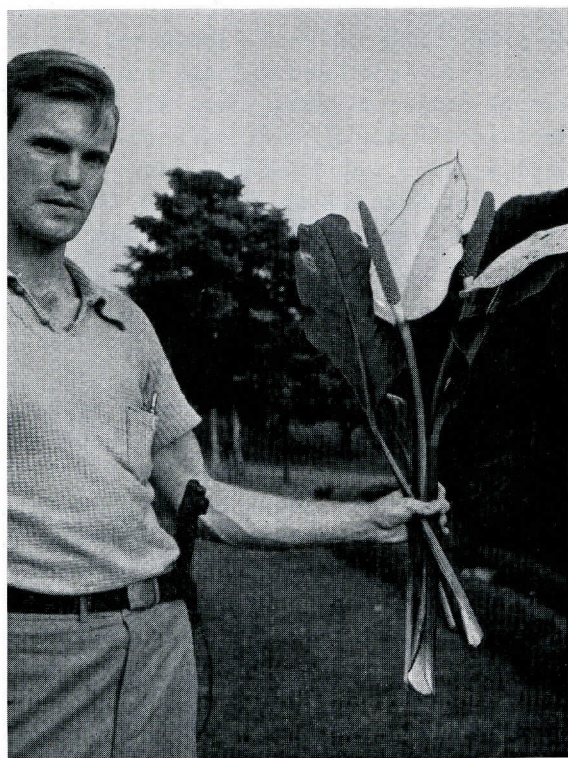
This tree gardenia was described in Occasional Paper No. 9 and young plants distributed in 1941. The plants distributed this year are from seed gathered later by Conicosa in the Makiling Arboretum of the Philippine Islands where handsome trees of it are growing. They flower twice a year and are covered with blooms that are very fragrant. Every effort should be made to establish this species here in South Florida.

**No. 30—F. G. Ex. *Pinanga philippinensis***

Shade loving patio palm described in occasional Paper No. 9.

**No. 31—F. G. Ex. *Calamus siphonospathus***

Rapidly growing, spiny rattan palm for special use only; described in O. P. No. 9. Deserves growing as source of rattan and because of remarkable spines and climbing character.



**No. 66** This aroid with spathes fourteen inches long and dead white in color was found by Hugo Curran, who is holding the flowers from which we took the seeds. The morning after this photograph was taken in Mrs. F. S. Baker's yard the great saw mill of the lumber concession her husband had charge of burned to the ground before her eyes. And now the war has engulfed Hugo Curran.

**No. 49—F. G. Ex. *Livistona merrillii***

Called the "Swamp Anahau" in the Philippines. Described in O. P. No. 9 before it had shown its identity with this species. It now appears to be the same as F. G. Ex. No. 60 and has already attracted our attention by its vigorous growth. Tall fan palm of graceful habit.

**No. 60—F. G. Ex. *Livistona merrillii***

The "Swamp Anahau" of Philippines. Same as No. 49. Described in O. P. No. 9.

**No. 66—F. G. Ex. Aroid**

Undertermined, with large white spathes which would be very showy in shady patio situation. More or less epiphytic in habit and suitable for pot plant or to hang in shady place in garden. Found in the dense forest on the Cadwalader-Gibson Concession, Tandoc, Camarines Sur, Luzon.

**No. 74—F. G. Ex. *Livistona robinsoniana***

Superb fan palm rising to nearly 100 feet in forests of Luzon. Its brown stems beautifully ringed. One of the "Anahau" palms. For trial as a dooryard palm, especially in partial shade. Described in O. P. No. 9.

**No. 87—F. G. Ex. *Livistona saribus***

The true "Tarau" palm of Luzon which instead of having brown or reddish fruits has beautiful indigo blue ones. It appears to be making a success here. Described in detail in O. P. No. 9.

**No. 92—F. G. Ex. *Ficus nota***

A tropical fig tree which bears fruits nearly two inches across that are edible. Described in detail in O. P. No. 9. This appears to be growing unusually well in our gardens.

**No. 114—F. G. Ex. *Vitex trifolia* var *ovata***

Covering the shifting sand dunes of Paoay near the Western Coast of Luzon, this low shrubby tree grows in abundance. Its leaves, unlike those of other *Vitex* are simple, not divided, but they are very fragrant. When I wandered over these dunes with Conicosa, the collector of the Makiling Arboretum, we sought in vain for seeds in quantity for I had it in mind that since



this pretty shrub grew well on the tropical beach sands of Luzon it should succeed on the beach sands of Miami and add another pretty lavender flowered plant to the flora of these beaches. I little dreamed that the Japanese would so soon land here and make a battlefield of this charming region.

**No. 117—F. G. Ex. *Ficus ulmifolia***

So harsh and rough are the leaves of this fig tree that they are used to polish wooden surfaces like table tops and cabinets. It is a variable species, sometimes a shrub, often a tree 15 feet high. In Luzon its fruits are said to be edible, turning orange red when ripe, but since the fig wasp which is necessary for the fertilization of the female flowers is not here its fruits are not good. It has been previously introduced.

**No. 203—F. G. Ex. *Mimusops kauki***

Siaoe is a miniature archipelago of the Dutch East Indies and on its largest island the Radja, Parengkuan of Oeloe resides. When the "Cheng Ho" dropped anchor at the base of the Gunung Api which was smoking 6000 feet above us, Daan Hubrecht and I went ashore to present our credentials. As the Radja was taking us from his office to his house we passed an avenue of beautiful trees which led from the beach up to the main road. It struck me as one of the most beautiful avenues I had ever seen, for the leaves of the trees were of a dark glossy green and the branches were covered with bright red ornamental fruits.

When I inquired admiringly about it the Radja said he had had it planted and that it was the "Kajoe Sawo" of Java. He ordered branches of it cut for me and the seeds from the fruits have furnished these plants for distribution. The fact that the trees grew almost down to the very strand confirmed my suspicion that this is a suitable tree for the marl prairies of our Florida coast. It is a favorite tree of the Javanese princes who plant it about their residences, and consider the fruits edible. They are eaten raw and are sweet but somewhat lacking in character. Whether there are better flavored seedlings I do not know. By Burkill this is considered a separate genus (*Manilkara*) and according to him is used as a stock for the

American sapodilla which it dwarfs. Americans seem never to have tried it as a stock for this strictly American fruit of which grafted varieties are recognized in the Orient. I hope later to give more facts regarding the sapodilla as it is cultivated in the Philippines and the Dutch East Indies.

**No. 214—F. G. Ex. *Salvia* sp.**

The village of Taroena on the Island of Taroena is a tiny tropical town, capital of one of the smallest of the archipelagos of which the Dutch East Indies are composed. The day after the "Cheng Ho" dropped anchor, our first anchorage after leaving the Philippines in late January 1940, and our first in Netherlands India, I went ashore with Hugo Curran to look for palms. As we were admiring one called the "Kavesu" which we found in a little dooryard along the road and which is now growing in our collection as F. G. Ex. No. 191, we found scat-



**No. 214** This little maid who refused to be photographed without the screen of pretty *Salvia* flowers will never know that a seed from a flower like those she held has grown, that cuttings from it have been made and that ladies living in houses which would all seem palaces to her are admiring it in their gardens. These two little girls were born on the island of Taroena an island typical of thousands scattered through the Malay Archipelago of the Dutch East Indies.



tered about us where we were searching for the beautiful red fruits of the palm, a very pretty white flowered species of *Salvia*. It fascinated both of us with its long slender stamens and a pistil which was 2 in. or more in length. We found very few seeds but I packed them in moist peat and luckily one seed has grown and from it Ray Vernon has propagated by cuttings enough for the distribution this year. It seems at home here and I hope may become a favorite in our gardens. Its specific name is still undetermined. I wanted to get a photograph of it and there happened along two pretty little girls and I gave a few sprays to one of them to hold, but when I raised my camera she was afraid and although her friend urged her to hold the flowers out to one side, she shielded her face with the flowers, and showed a degree of real modesty which I could not help admiring. I did not



No. 315 To one who never hunted for a wild relative of a cultivated plant the excitement of the discovery which is photographed here will scarcely appeal. But having in my yard a bearing *Antidesma* tree gave a peculiar thrill to the finding of this wild tree on the shore of Manipa island at the gateway to Amboina. I had climbed the slope to get a pretty Wax plant which I saw growing over a small tree and when I reached out for the wax plant my hands touched the berries of what I knew was an *Antidesma*. The berries had a different flavor but quite as fine a one as those of *A. buniis* and they stained my clothes as brilliantly too.

learn her name but I present her to you, this little girl of the Sanghi Islands which may for all I know now have become one of the landing places of the Japanese invasion of the peaceful civilization of Netherlands India.

No. 251—F. G. Ex. *Harpullia* sp.

On the roadside back of Gorontalo, Celbes, stands the beautiful tree from which came the seeds which are now being sent out as plants. As we drove along we were halted by the sight of a large tree covered with great clusters of showy fruits. These clusters were 2 ft. long and bore hundreds of orange colored pods which were turning lacquer red as they ripened and which showed as they split open, pretty mahogany brown seeds. Forty or more pods made a cluster and the tree appeared to be a perfect mass of these. If it thrives here it should be a real addition to our parks and gardens. It belongs to the same family to which the Lichee and Soapberry belong, the Sapindaceae, and I see in the literature that my old friends Koorders and Valeton, authorities on the trees of Netherlands India suggested that it was showy enough when in fruit to be worth cultivating. As yet I do not think it has been however.

No. 276—F. G. Ex. *Antidesma montanum*

In the great collection of trees in the Botanic Garden of Java, noted throughout the world as the "Buitenzorg Gardens" I found two species of *Antidesma*, one according to its label from the Island of Java and the other from somewhere in Sumatra. Both were labelled *A. montanum*. Unfortunately our return to the Garden was prevented by the war and I was unable to get from Mr. Dakkus the Custodian of the garden, more information concerning these species. But I did taste the ripe fruits of both of them and found them more spicy or tart than *Antidesma buniis* with a suggestion of bitterness. I gathered some seeds of them both to try beside my *A. buniis* tree in the Kampong. Of these only the Sumatra type has produced enough plants for this year's distribution.

In the development of this new tropical fruit, which I trust may some day absorb the attention of plant breeders, this form may play a part, just what part nobody can predict. Standing



near the bridge on the Makiling Arboretum grounds near Laguna, I fear now within sound of the guns on the shore, there stood last year an old tree of this *Antidesma bunius*, called in the Philippines the "Bignay," from the fruits of which an excellent wine was produced by Miss Arosa of the Bureau of Plant Industry of the Philippines. From all I could learn, this solitary tree is the source of the trees now growing in America, including my own on the Kampong. It was loaded down with half a ton of fruit when I saw it, which strengthened my opinion regarding its extra-ordinary fruit-producing capacity and made me more inclined than ever to urge its wider culture in South Florida.

**No. 315—F. G. Ex. *Antidesma* sp.**

A wild species with edible fruits found on Manipa Island in the Dutch East Indies where it grew on the rocky cliffs above the sea. A handsome tree introduced for its own beauty and edible fruits and for the plant breeders. See details under the photograph.

**No. 331—F. G. Ex. Undetermined palm from Amboina.**

May 9, 1940, the day before the German armies marched into Holland and all the Germans in Amboina, that historic island so long the home of the great Rumphius, were interned, and plant collecting was forbidden, Hugo Curran brought in the seeds of this solitary 20 ft. feather palm. Its leaves seemed to have a tough hard rubbery character unlike that possessed by any other palm with which I was familiar. He had collected them in the river valley back of the town. The characters of its inflorescence and its fruits evidently barred it from the genus *Pinanga* and so far its systematic position has not been determined. Since the specimen which he saw had fruited when it was only 8 ft. tall and the fruits were a beautiful lacquer red, born on fruit stems of greenish yellow, I am banking on this palm to make its way in the gardens of this region.

**No. 379—F. G. Ex. *Fagraea* sp.**

This strikingly handsome shrub or small tree with white flowers  $3\frac{1}{2}$  in. across was discovered growing on the limestone cliffs of Kahatola Island by Mrs. Fairchild and Capt. Kilkenny of the "Cheng Ho" on May 31, 1940. We had

anchored among the South Loloda Islands which lie off the west coast of that curiously shaped island of Halmahera which in the days of Wallace the great naturalist, was called Jilolo or Gilolo. Halmahera is easiest found on modern American maps by locating the Spice Island of Ternate, that volcanic island so noted in history because of its being one of the very few spots on earth where the clove trees grow and fruit. The South Loloda Islands lie off Halmahera's West Coast some 60 miles North of Ternate.

These islands are so infrequently visited even by the naturalists of the Netherlands East Indies that we had been able to learn practically nothing about them. We were astonished when we sailed in among them to find ourselves surrounded by pinnacles of rock rising nearly 300 ft. into the air, straight from the waters edge, forming islands of striking beauty covered with lianas and palms and ferns and dense vegetation clear to their summits. Over the cliffs tumbled waterfalls, the distant roar of which we could



**No. 379** It was too bad that this handsome ivory-white flower had wilted badly before Mr. Beckwith had a chance to photograph it; so that its beauty is not evident. From the looks of the young plants to be distributed it seems possible that it will make itself at home here with us. We do not yet know its proper specific name; its generic one is *Fagraea*.



hear from the Junk and the silver sheen of which flashed against the green background.

Mrs. Fairchild describes how, rounding a slight promontory in the launch, and coming into a little cove with one of these lovely waterfalls at its far end, she and Capt. Kilkenny saw some big flowers gleaming white against a background of thick glossy dark leaves. It was this beautiful tree with leaves 10 in. long and quite thick, like those of the "Rubber" tree of American back parlors.

Mrs. Fairchild knew we had seen nothing like it before and suspected correctly that it was something entirely new to me. I shall never forget her face as she brought it up the gangway to show me. With the books on board I could not get far in its identification, but Dr. Merrill familiar as he is with oriental tropical plants, located it immediately as belonging to the genus *Fagraea* of the family of Loganiaceae which is



No. 379 A bunch of fruits of the *Fagraea*, one of them opened to show the innumerable small seeds. The only fruits Mrs. Fairchild could find were so hard and apparently green when brought aboard the "Cheng Ho," that I at first despaired of getting any mature seeds but in the wind tunnel in the laboratory they ripened and I was able to send in quantities of them to the Garden. It is from some of these that the plants to be distributed have grown.

essentially a tropical one. From its habit of growing out of a crevice in the limestone rock it was perhaps fair to assume that it would grow well in the limestone soils of south Florida. In Col. Montgomery's slat house its seedlings have done unusually well and will be large enough to place in the hands of members of the Garden Association this spring. They should be tested in localities where the *Clusia* grows, for we assume that, like it, this newcomer is inclined to be epiphytic. Now that we have living plants of this handsome Immigrant with us, a look at the literature reveals, that the greenhouses of Europe experimented with plants of this genus many years ago and that as "stove" plants three species were growing in England when Nicholson published his dictionary in 1886. If only the collections of tropical plants in the conservatories of that time, when the world was being ransacked to supply them with novelties, could have been made available to us here in Florida our gardens would be much richer than they are now. The famous Botanical Magazine of London running since 1787, has published thousands of illustrations of tropical species of plants, many of which deserve to be introduced here for our patios and gardens. Hundreds of forms which might have done well here have been lost or discarded from the hot houses where they once were appreciated, but many interesting species about which we are ignorant remain in them still.

Through the kindness of Prof. Fernald of the Gray Herbarium, I have just received photographs of two plates that appeared many years ago in the Botanical Magazine. One shows the cream colored very fragrant flowers of *Fagraea obovata* from Sylhet India which flowered in the Liverpool Botanic Garden in 1846 and the other those of *F. zeylanica* from a river bank in Ceylon which flowered in the Royal Botanic Gardens of Kew and is, according to Joseph D. Hooker, "one of the handsomest species of a fine tropical and Polynesian genus of which some twenty species are enumerated by Ben-  
tham."

Since the trying circumstances which surrounded the getting of the flowers of this Halmahera species prevented Ned Beckwith from making a photograph of a perfect flower, I am reproducing a part of the plate which was made



under the great Hooker's direction from a flower of the Ceylon species that opened in Kew Gardens in 1873. May this seed which we collected in Halmahera open the way to the trial here of other beautiful species of this genus.

And now at the moment when the Japanese are attacking Singapore and we do not know if they may not take it and change the course of history Dr. Corner's excellent book "Wayside Trees of Malaya" lies open before me and there on p. 424 I discover that another *Fagraea*, *F. fragrans*, a tree called the "Tembusu" is one of the most characteristic trees of Singapore and one with the most regular flowering seasons of any tree in Malaya. It flowers twice, once in May or early June, again in October or November. Each year it scents the city of Singapore and "after its ghostly flowers come flying foxes to gorge upon the fruits at night." It inhabits the open and swampy lowlands throughout Malaya, where it reaches a height of a hundred feet. Strangely enough I had a memorandum written to my friend Dr. Holtum, the Director of the Singapore Botanic Garden asking for seeds of this tree. As I write these words I am wondering where in that maelstrom of human horror and strife he is now. The exchange of plant seeds went on during the last great war but during this one the borders have been strangely and terrifyingly closed. If Japan takes Singapore a strange and difficult language may descend upon that part of the world, for how long nobody can predict.

No. 399—F. G. Ex. *Tacca palmata*.

This perennial with underground stems and palmate leaves formed small pretty patches of vegetation in the forest shade back of the small Kampong of Gedi on the west coast of Halmahera. Its striking red berries, which are curiously lobed and  $\frac{3}{4}$  in. across and borne in bunches of ten or so, make a patch of it very showy, according to the account which Hugo Curran brought in from the trail to Mt. Loloda. A close relative, *Tacca pinnatifida*, the Otaheite Saleplant or South Sea Arrowroot-plant bears tubers which yield a fine quality of arrow-root but this one appears to be only medicinal in Java, the scrapings of the root being applied to snake bites. Recommended for patios.

No. 421—F. G. Ex. *Premna* sp.

I was walking along a narrow trail through the forest back of a tiny Kampong in Karakelong Island (of the Talud archipelago) which is so seldom visited that even its shells were unknown, when my attention was attracted to a bushy tree simply loaded down with black fruits. It looked so like a tree of *Premna odorata* which I have on the Kampong and of which the fruits are devoured by the mocking birds that I thought it was a form of that species. Now that I have it growing across the swimming pool from my old tree I see they are distinct. If it turns out to be as prolific a fruiter as *Premna odorata* it will add another "bird food tree" to this region. It belongs to the Verbena family.

But there may be more to these *Premnas*, as that first introduction *Premna odorata* which C. F. Baker (noted entomologist of the Philippines) sent us in 1913, would indicate. (SPI 35453). He reported that the dried leaves con-



*Fagraea zeylanica*.—The great botanist Joseph D. Hooker had a plate prepared to illustrate his account of the first blooming of this plant from Ceylon. This was in the Royal Gardens at Kew in 1873. This was published as plate No. 6080 in the Botanical Magazine of London. Only a portion of the plate is here shown. It is a relative of F. G. Ex. No. 379 which we are distributing. Some day this too may find its way into our gardens provided we make a success of this one from the South Loloda Islands.



tained something repellent to lice on poultry. I find in the literature of Netherlands India and the Malay Peninsula, where other species grow, that the leaves of one species are eaten and of another enter into the making of chutneys and are used as a vegetable, of another that the leaves are cooked with fish to mask the objectionable odor of certain species, and that most of them appear to have been used in native medicines. Little value seems to be attached to the timbers of these *Premnas* of which there are 45 species scattered through the tropical islands of the Old World, but there are perhaps several which would add to our landscapes and be useful for hedges and increase the bird food of this section.

**No. 441—F. G. Ex. *Gardenia philastreii***

A tree *Gardenia* that was growing in the yard of Mr. Montague Lord of Manilla, from seed



**No. 331** This undetermined palm with thick, leathery leaves, beautiful lacquer-red fruits and small stature may well become a favorite of our patios as it seems to give promise of growing well here. It comes from the island of Amboina, famous to naturalists as being the home of Rumphius whose "Amboinsche Kruid-Boek" or "Herbarium Amboinense" is the earliest comprehensive book on tropical plants. Dr. Merrill has written a masterly promise of growing well here. It comes from the island simple monument which marks the last resting place of Rumphius in the town of Ambon.

which he gathered near Ankor Wat, the famed ruins of Cambodia. When in bloom may its large white flowers 3 in. long scent the gardens here in Florida as they have for years the beautiful garden of Mr. Lord. (See description in O. P. No. 9.)

**No. 3411—F. G. Ex. *Ficus* sp.**

According to Hugo Curran's description of this tree which he found at Paloe during his collecting trip through the island of Celebes, it is 60 ft. tall with drooping branches and so covered with orange fruits in the axils of the large leaves, (8 in. long and 3 in. broad) that it reminded him of the American Holly. He strongly recommended it as a specimen ornamental tree or general shade tree and sent in a quantity of its tiny seeds. As I write I cannot help wondering if some day Hugo may see it growing here. He is now perhaps engaged in the battle that is raging about his home on Mt. Makiling in the edge of the wonderful Arboretum.

**No. 3449—F. G. Ex. *Salacia* sp.**

This very attractive glossy leaved, scandent vine with large red fruits was found by Hugo Curran growing in the beach sand near Poso, on the island of Celebes, Netherlands India. There are not so many tropical vines of any kind that will grow in the beach sands of the seacoast and since the fruits of this one are an inch in diameter and contain a gelatinous milky white pulp of a sweetish flavor it should be worth while to add this vine to our collections. It belongs to the family of the Bitter Sweet (*Celastraceae*) and should make an attractive arbor or trellis vine. The other species of this genus seem all to bear edible fruits.

**No. 3452—F. G. Ex. *Allophylus* sp.**

A climbing vine which bears long, simple stemmed clusters of brilliant red fruit that are most attractive. These clusters are sometimes 10 in. long and the fruits  $\frac{3}{8}$  in. in diameter and thickly placed on the stem. It was found at Tana Mea on the Dongala road in northern Celebes, Netherlands India. There are 100 named species of this genus scattered through the tropical world, some of which grow in the tidal mud and bear edible fruits. The reddish orange pulp of this one is probably edible too, although no extensive tests were made. It belongs to the *Sapindaceae*.



## ADDITIONAL NEW INTRODUCTIONS

In addition to the plants originating from seeds brought in by the Fairchild Garden Expedition and described above, the following introductions obtained through correspondence or from other sources are offered to members.

**Combretum grandiflorum.** The striking red and orange flowered vine from the Gambia, of which a description was published in Occasional Paper No. 3. This demands full sunlight—an open situation—or it will not flower profusely. Severe pruning every year increases the number of its gorgeous flowering branches.

**Eleagnus philippensis.** The “Lingaro” of the Philippines whose fragrant flowers and pretty bead-like fruits make it a desirable climbing shrub for small places. Its sweet fruits can be used in making a sherbet much resembling that made from the raspberry. While I was in Manila the American lady, Mrs. R. M. M. McCrory, who first sent the seeds of this vine to America, to whom I gave the credit in my article about the Lingaro in Good Housekeeping, wrote me and I called on her. I discovered that she had a plantation of the fragrant flowered Ilang Ilang tree and was making her living out of the manufacture and sale of the perfume of its flowers. The tree is well known to many of our members who have it in their yards. Mrs. Fairchild still has a bottle of perfume which she gave me as a souvenir. She is a real plant lover and takes the greatest satisfaction in knowing that she introduced the Lingaro to the American public.

**Securidaca virgata.** A rampant growing vine known as “Enredadera de hacha.” It is also known as “Flor de la Cruz.” as is that other beautiful flowering vine related to it, *S. diversifolia*. It has lighter colored flowers. I once saw, covering the house of the Governor of Surinam at Paramaribo, a vine of *S. diversifolia* which was a solid mass of purple flowers. There appear to be thirty species scattered throughout the tropics the fibers of one being used for making sailcloth, one furnishes an oil and one a snake remedy.

**Ormosia panamensis.** This is a medium sized tree with lavender flowers and beautiful scarlet seeds which came to us from the Summit Gardens of Panama. Makers of seed necklaces

will want the seeds because of their solid red color. Other species have black and red seeds.

**Terminalia edulis.** In the Summit Gardens of the Panama Canal Zone, I saw large spreading trees of this species bearing enormous crops of purple fruit which had a fine acid flavor making them suitable for jam or jellies. Since certain species of *Terminalia* have done particularly well here in South Florida even on low lands subject to overflow, this species may grow well here. Its seeds were sent from Mindoro, one of the Philippine islands, in 1929 by P. J. Wester who wrote that it was called the “Dalinsi” there and that its dark red fruits resembling small plums had a pleasantly acid flavor and should make good jelly. It is a tree of the forests all



No. 3411 Perhaps Hugo Curran's enthusiastic description of this handsome species of wild fig may seem far fetched to many of us; for how can a ficus “look like a holly?” But if this species continues to grow as well as it has started out to do here on the Kampong its large handsome dark green leaves will make it a striking tree whether it bears its brilliant red fruits or not.



the way from North Luzon to South Mindanao and has over 35 native names but has not been cultivated yet by the Philipinos.

There appear to be over 120 species of *Terminalia*s, most of them trees and they are scattered through the forests of America, Africa, Madagascar, Asia and Australia. Because of their adaptability to Florida conditions where lands are flooded occasionally they deserve especial study. Our West Indian Almond, *Terminalia catappa* is a most valuable tree for our shores. Imagine them without its gorgeous autumn red foliage. Corner in his great work, "Wayside Trees of Malaya" extolls the beauty of the Kedah Tree, *Terminalia pyrifolia* which grows in the rice fields and on the sea-shore and limestone cliffs of Langkawi, saying that its bright yellow leaves announce the coming of the long dry season which occurs in that region between Burma and Malaya where the battles are going on now. There is a Papuan *Terminalia* that bears excellent nuts called the Okari which Harrison Smith has growing now in Tahiti.

**Arenga ambong.** A short stemmed feather palm forming large tufts or clumps of foliage that are very beautiful. Its leaves are long and characterized by their very broad leaflets sometimes 2½ ft. long and 4 inches wide. It is native in the same island of Palawan P. I. where the *Adonidia merrillii* occurs and Dr. Merrill in his Philippine Palms and Palm Products remarks that it is "a very beautiful species but never cultivated in the Philippines for ornamental purposes although well worthy of being so." *Adonidia* has done so well here that we have hopes for this short stemmed *Arenga*.

**Opsianra maya.** The handsome feather palm which Dr. O. F. Cook discovered near one of the Maya monuments in Peten Guatemala and which was illustrated and described in Occasional Paper No. 1. Seedlings from the tree there described. Suitable for patios and dooryards because of its handsome fruit clusters.

**Caryota rumphiana.** A tall growing sixty foot palm related to the "Fish Tail Palm." It does not sucker at its base but makes a stately tree. Native of the Malay Archipelago extending to Australia. It is much planted in Manila because of its ornamental appearance. Probably requires a shady position.

**Ptychoraphis augusta.** A feather palm from the Nicobar Islands, north of Sumatra. It grows there to 100 ft. and a foot in diameter with leaves 6 to 10 feet long. It has fruit clusters 3 feet long composed of scarlet fruits an inch long. If it fruits well here it may add another showy palm to our gardens.

**Cassia marginata.** One of the most striking of the flowering *Cassias*. A small tree with handsome leaved drooping branches which are covered in spring with masses of large reddish pink flowers. Native of Burma but introduced from the Buitenzorg Garden of Java. First flowered at the Chapman Field Plant Introduction Garden as Plant Introduction No. 75977; introduced in 1928.

**Garcinia livingstonei.** This strange appearing tree which Dr. H. L. Shantz found near Victoria Falls in Southern Rhodesia in 1919 was loaded with fruits of an orange color and very pleasant flavor and the natives were very fond of them. As S. P. I. No. 49169 I have grown two trees of this on the Kampong but neither has fruited because I suspect they have not complemented each other in the matter of sex. One tree however in the Chapman Field Garden has borne quite regularly and its fruits are keenly relished by the children there. In flavor they suggest faintly the mangosteen to which the tree is related. The plants here offered to members of the Garden Association were grown from seeds from that tree and it is hoped that they may prove better fruiters and possibly be of better flavor even than any so far fruiting in South Florida.